

WHAT IS CLAIMED IS:

1. An electric power steering apparatus for controlling a motor based on a current command value calculated from a steering assist command value calculated based on a steering torque generated in a steering shaft and from a current detection value of the motor which gives a steering mechanism a steering assist force, comprising:

a torque filter for processing a torque signal;

an SAT estimating function;

and

an SAT filter for signal-processing SAT information from said SAT estimating function,

wherein:

said electric power steering apparatus also comprises a control system with two degree of freedom which is capable of independently designing frequency characteristics of steering feeling and road information sensitivity.

2. An electric power steering apparatus according to Claim 1, wherein gain of said steering feeling is set such that the gain maintains at a constant value up to frequency as high as possible.

3. An electric power steering apparatus according to Claim 1, wherein said road information sensitivity can eliminate information in an unnecessary frequency band.

4. An electric power steering apparatus according to Claim 3, wherein said unnecessary frequency band is in a range of 10Hz to 30Hz.

5. An automobile which is equipped with the electric power steering apparatus according to any one of the preceding Claims 1 to 4.